STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street • Baltimore, Maryland 21201
Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

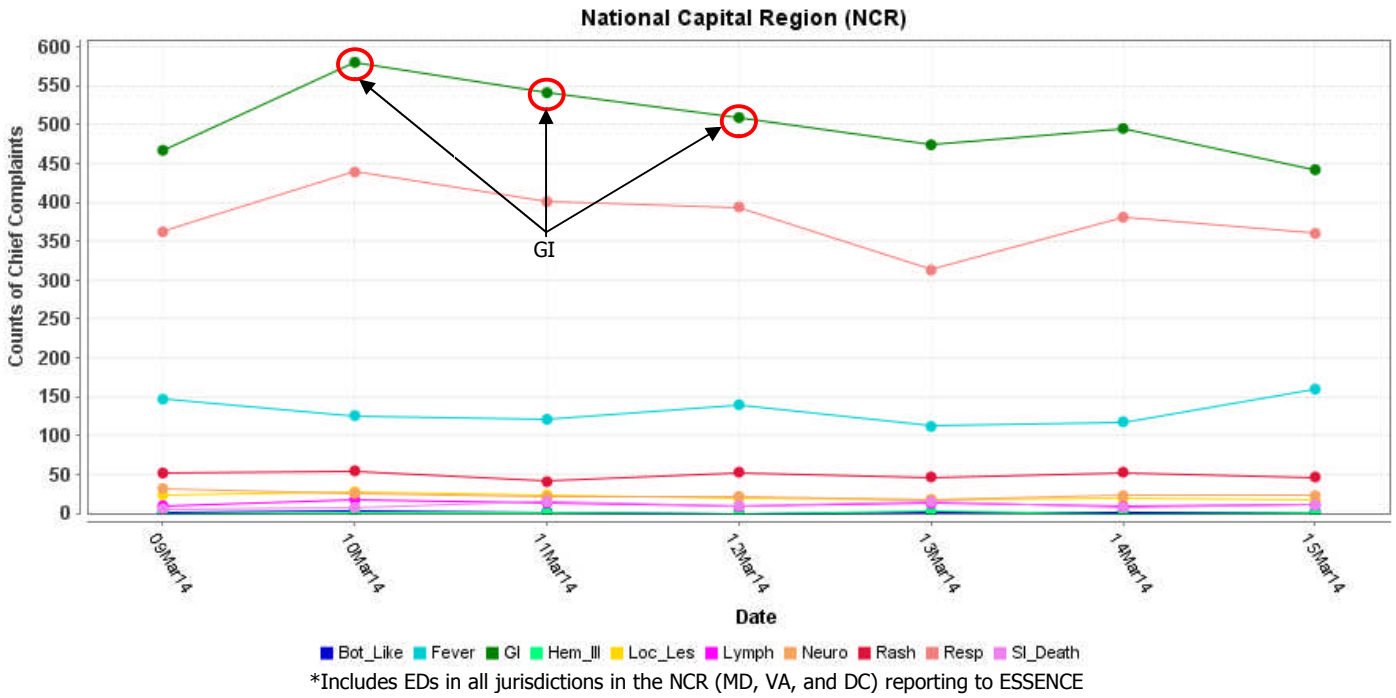
March 21, 2014

Public Health & Emergency Preparedness Bulletin: # 2014:11
Reporting for the week ending 03/1514 (MMWR Week #11)

CURRENT HOMELAND SECURITY THREAT LEVELS

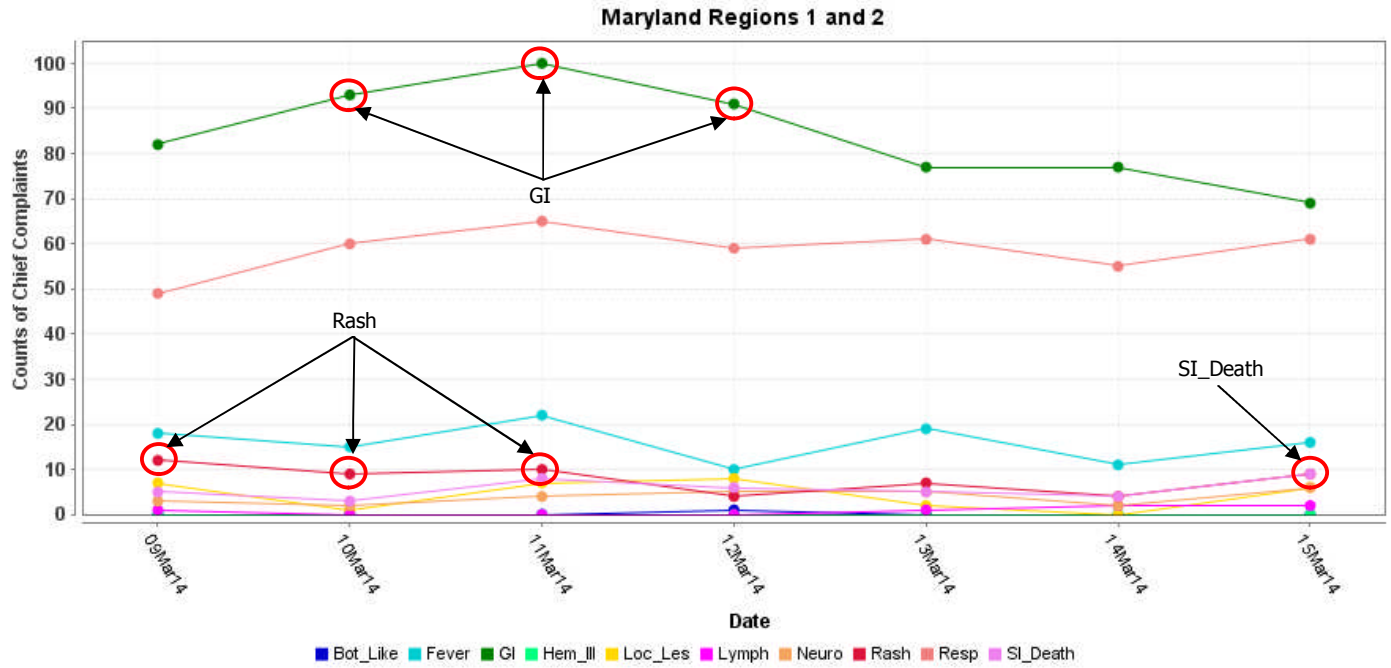
National: **No Active Alerts**
Maryland: **Level Four (MEMA status)**

SYNDROMIC SURVEILLANCE REPORTS
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

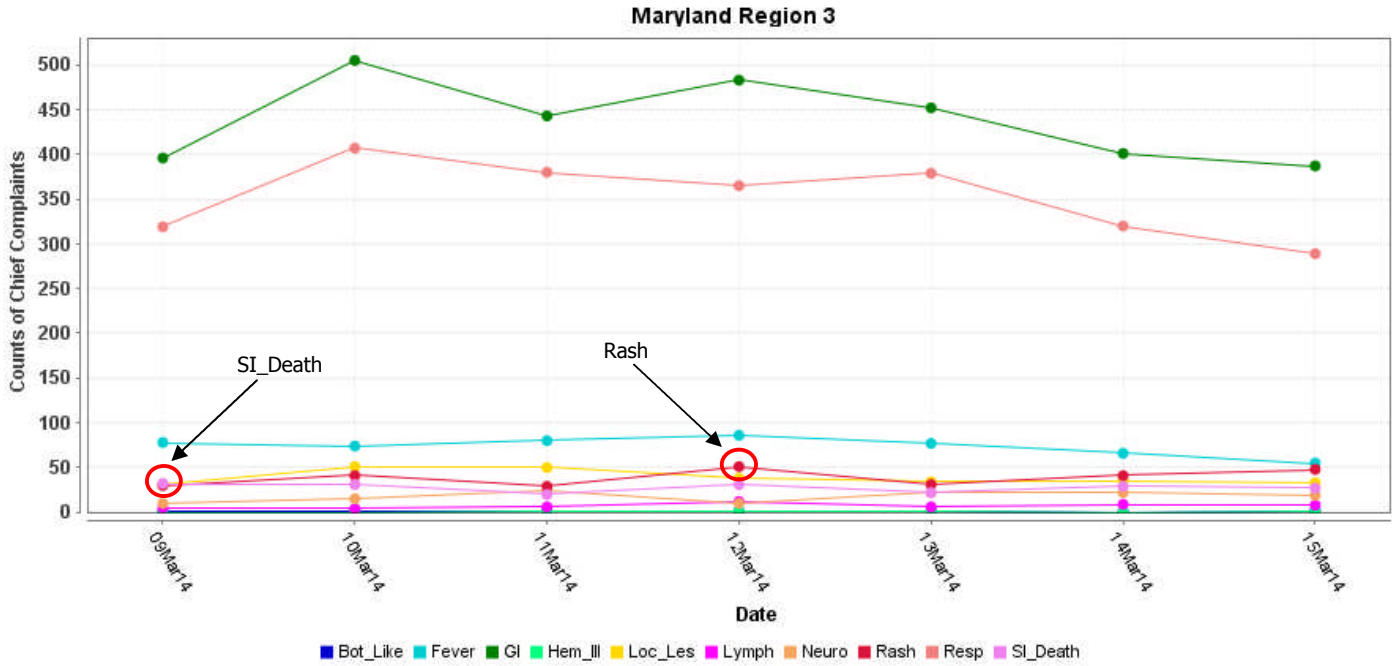


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

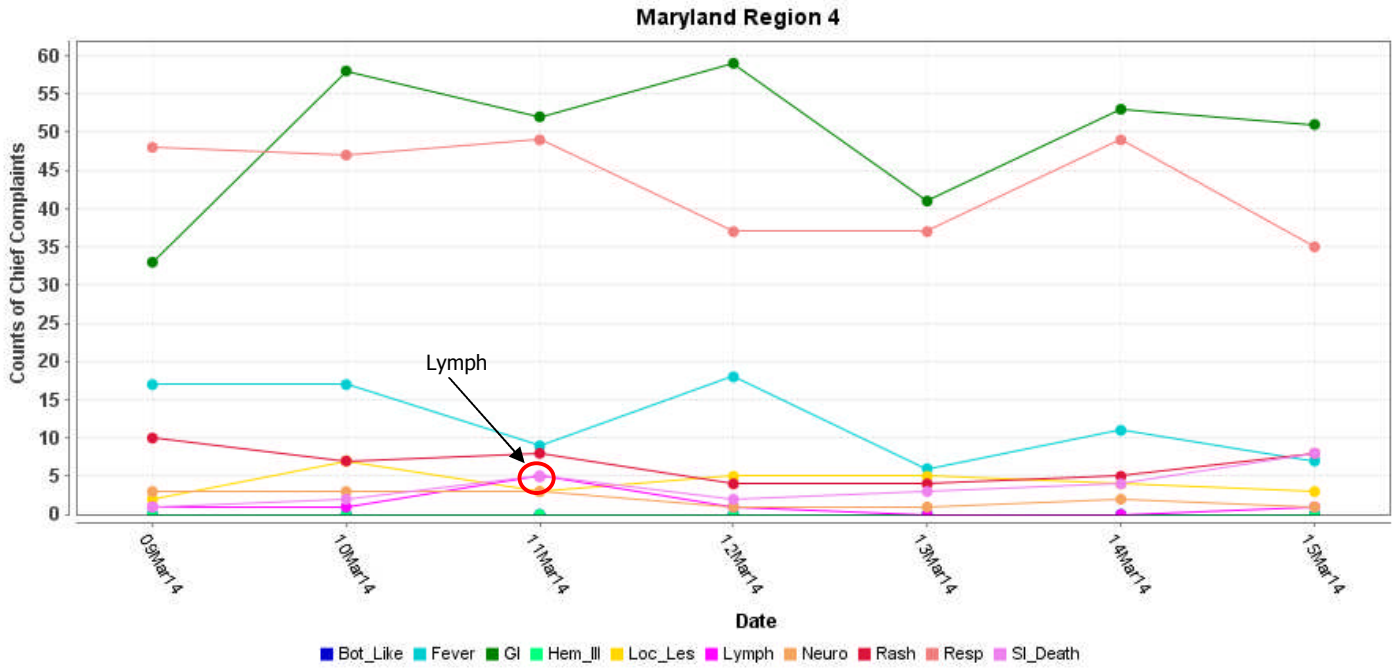
MARYLAND ESSENCE:



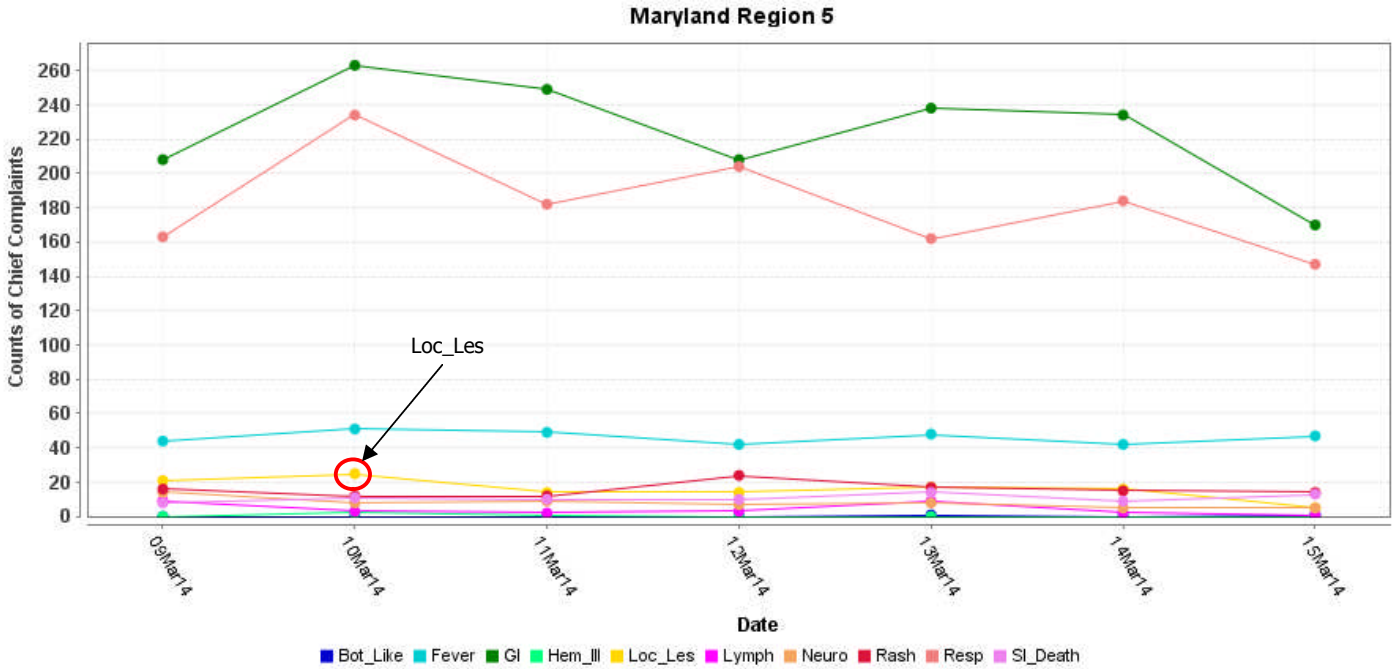
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



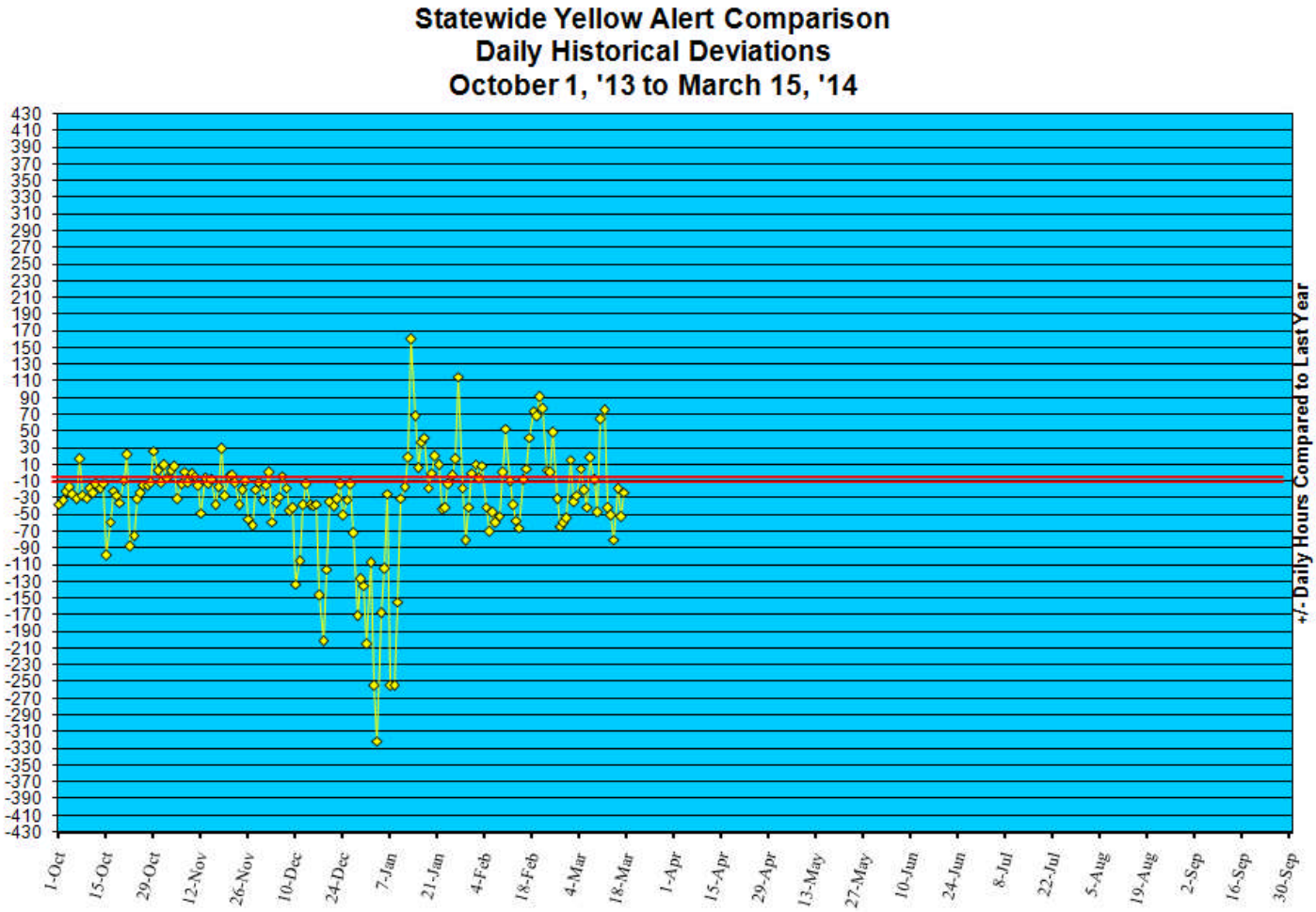
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/13.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in February 2014 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (March 9 - March 15, 2014):	4	0
Prior week (March 2 - March 8, 2014):	14	0
Week#11, 2013 (March 10 - March 16, 2014):	7	0

15 outbreaks were reported to DHMH during MMWR Week 11 (March 9-15, 2014)

8 Gastroenteritis Outbreaks
1 outbreak of GASTROENTERITIS in a Nursing Home
3 outbreaks of GASTROENTERITIS in Assisted Living Facilities
1 outbreak of GASTROENTERITIS in a Hospital
2 outbreaks of GASTORENERITIS associated with Schools
1 outbreak of GASTROENTERITIS associated with a Daycare Center

2 Foodborne Outbreaks
2 outbreak of GASTROENTERITIS/FOODBORNE associated with Restaurants

4 Respiratory Illness Outbreaks
1 outbreak of INFLUENZA in a Residential Treatment Facility
1 outbreak of ILI in an Assisted Living Facility
1 outbreak of ILI associated with a School
1 outbreak of PNEUMONIA in an Assisted Living Facility

1 Rash Illness Outbreak
1 outbreak of IMPETIGO associated with a School

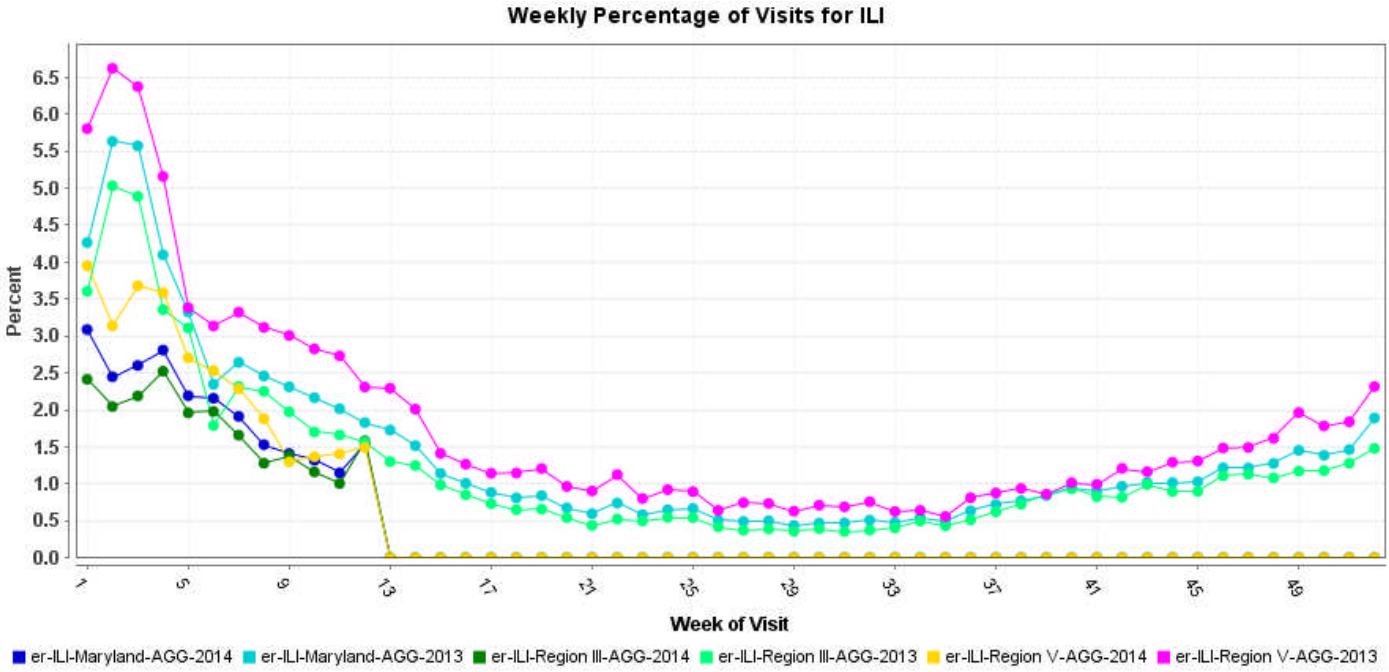
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity for Week 11 was: Local with Minimal Intensity.

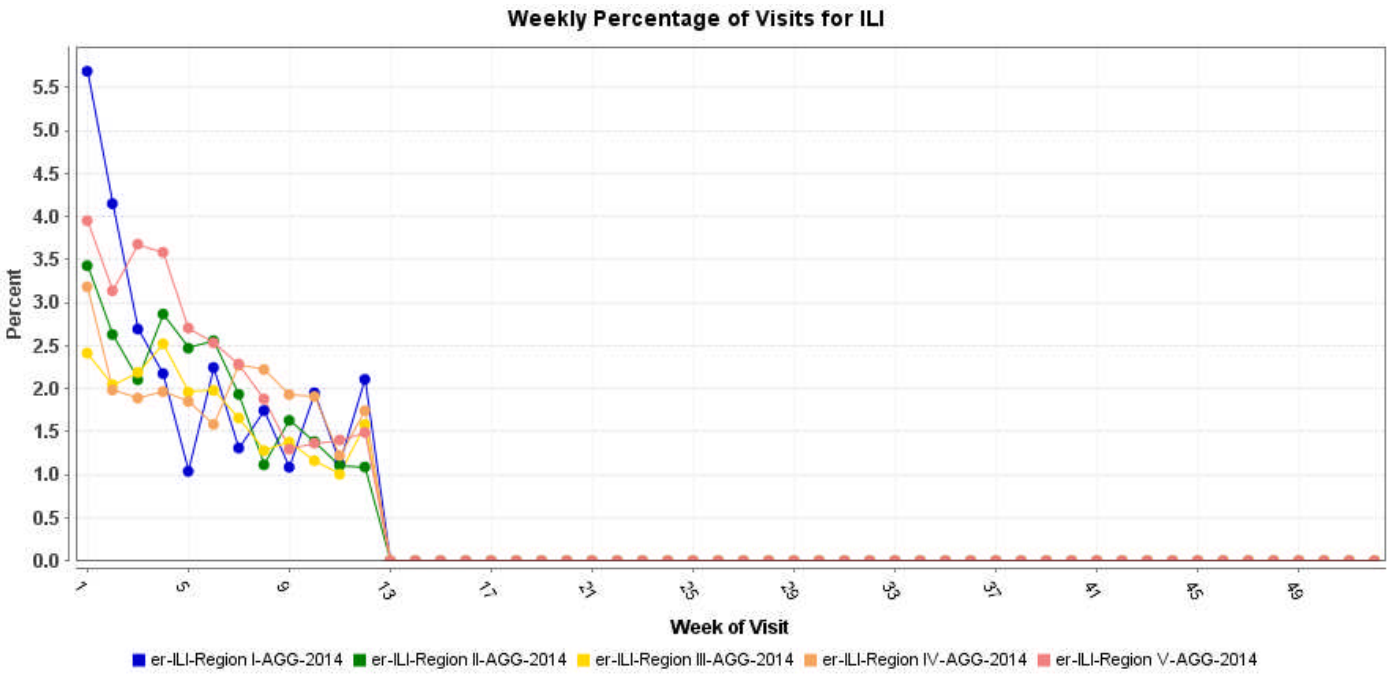
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



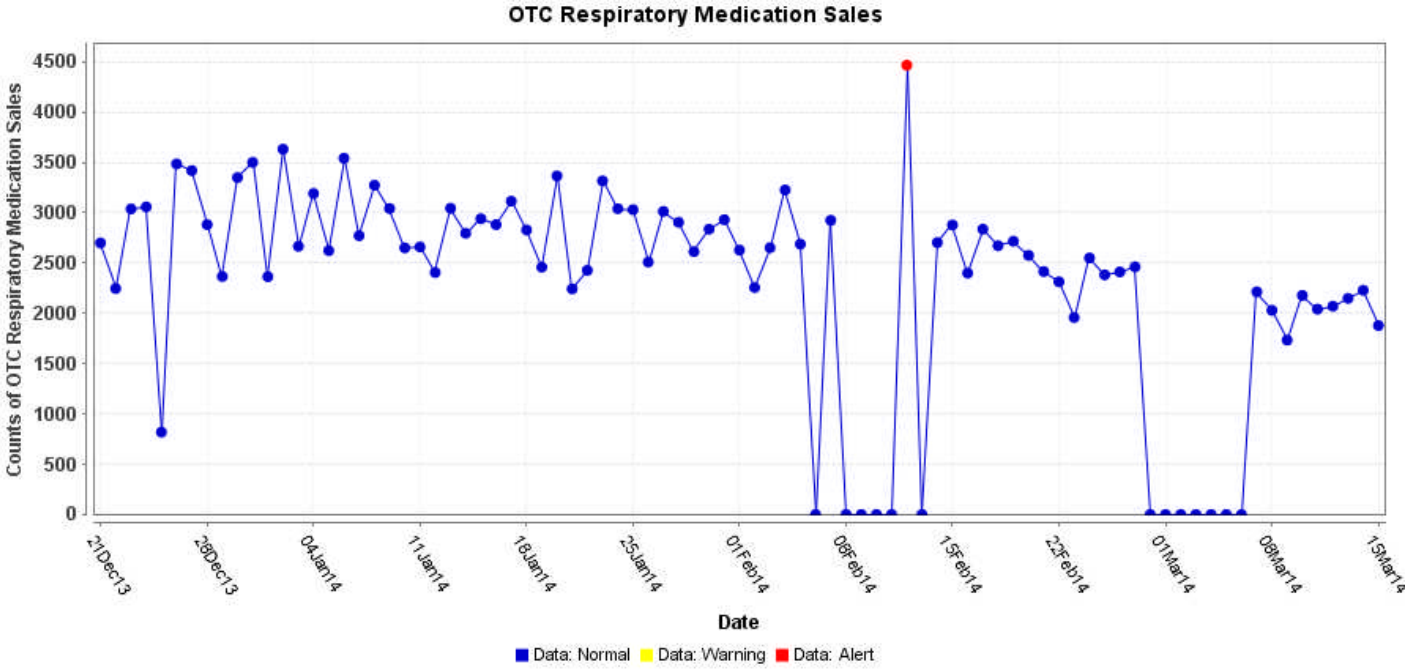
* Includes 2013 and 2014 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2014 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of January 24, 2014, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 650, of which 386 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

AVIAN INFLUENZA (H5N1): The H5N1 strain of avian influenza virus, clade 2.3.2.1C, which has been prevalent in Viet Nam's northern regions, was discovered for the 1st time in a number of dead ducks in southern Dong Nai province, about 1120 km [about 696 miles] from capital Hanoi, local media reported Friday [7 Mar 2014]. State-run Viet Nam News Agency quoted an official from Dong Nai province's Animal Health Department as reporting that results were confirmed after a sample from the birds tested positive for the virus. Previously, the A/H5N1 strain, clade 1.1, was found in affected poultry sold at many markets across Viet Nam, with the availability rate up to 6 percent in 2013. From late 2013 and particularly in the 1st 2 months of 2014, the A/H5N1 strain, clade 2.3.2.1.C, has penetrated into southern regions, along with clade 1.1. To date [7 Mar 2014], 8 out of 13 cities and provinces in southern Mekong delta were reported to be struck with avian flu outbreaks. Dong Nai province is home to the largest number of poultry raised nationwide, with over 12 million. It is also located at the gateway of Ho Chi Minh City, the key economic hub in the south. As such, the transportation of poultry products is more likely to trigger the outbreak of bird flu, according to the local animal health department. Currently, only 10 percent of the poultry in Dong Nai has been vaccinated against the A/H5N1 strain of the virus. Earlier, the province detected 2 bird flu cases in Trang Bom and Cam My districts. The latest statistics from the National Steering Committee on Bird Flu Prevention and Control revealed that the H5N1 virus hit 23 provinces and cities across Viet Nam, with over 80 000 infected poultry culled. A total of 2 Vietnamese died from the virus so far this year [2014], one in southern Binh Phuoc and the other in Dong Thap provinces.

NATIONAL DISEASE REPORTS*

SALMONELLOSIS (USA): 14 March 2014, In early 2013, 4 clusters of human salmonellosis infections were identified through PulseNet, the national molecular subtyping network for foodborne bacteria. Many of the ill persons in these clusters reported contact with live poultry, primarily chicks and ducklings, from a single mail-order hatchery; therefore, these investigations were merged. During 4 Mar 2013-9 Oct 2013, a total of 158 persons infected with outbreak strains of *Salmonella Infantis*, *Lille*, *Newport*, and *Mbandaka* were reported from 30 states. 42 percent (65 of 155) of ill persons were aged 10 years or less, and 28 percent (29 of 103) were hospitalized; no deaths were reported. 86 percent (80 of 93) of ill persons who were interviewed reported live poultry contact in the week before illness onset. 69 percent (44 of 64) of ill persons who completed a supplemental live poultry questionnaire reported chick exposure, and 40 percent (26 of 64) reported duckling exposure. 75 percent (33 of 44) of respondents reported live poultry exposure at their home; 59 percent (26 of 44) specifically reported keeping poultry inside their home. Of the 40 ill persons who had recently purchased young poultry, the average time from purchase of poultry to illness onset was 21 days (range=2-52 days); 48 percent (19 of 40) ill persons reported illness onset within 2 weeks of poultry purchase. Among persons with purchase information, 94 percent (62 of 66) reported buying young poultry sourced from a single mail-order hatchery in Ohio. This outbreak investigation identified an Ohio hatchery as the likely source of the outbreak. This hatchery previously has been linked with multiple, large human salmonellosis outbreaks (1,2). These recurring outbreaks highlight the need for comprehensive salmonellosis prevention and control programs to be implemented and maintained at this mail-order hatchery and its associated breeder farms. Mail-order hatcheries and their source flocks should comply with management and sanitation practices outlined by the US Department of Agriculture's National Poultry Improvement Plan.* Additional owner education is necessary because healthy birds can still transmit the bacterium to humans. Educational material warning customers and advising them on how to reduce the risk for salmonellosis from live poultry should be distributed by farm/feed stores and mail-order hatcheries with all live poultry purchases (3). Reducing the spread of salmonellae in mail-order hatcheries, in their source flocks, and in the feed store environment is critical to reduce the risk for human illness. This outbreak highlights the need for a comprehensive approach involving human and animal health officials and practitioners, industry, and backyard poultry flock owners. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

DIETRY SUPLEMENT, HEPATIC TOXICITY (USA): 11 March 2014, A 2013 hepatitis outbreak that was linked to a fat-burning supplement manufactured by USPlabs LLC may have affected nearly 100 people in more than a dozen states. The CDC reported 97 cases and a death in 16 states including Hawaii that met its case definition, said Bernadette Burden, a CDC spokesperson. The figure is up from 56 cases reported in early November 2013. CDC does not explicitly reference consumption of OxyElite Pro in its definition of a "case." The health agency previously defined a case "as acute hepatitis of unknown etiology occurring on or after 1 Apr 2013, in a person who had consumed a weight-loss or muscle-building dietary supplement within the previous 60 days" and met certain other requirements. Dallas [Texas]-based USPlabs did not respond to a request for comment on the current number of cases under investigation. Roughly half the cases are in Hawaii, where local officials in 2013 reported a death and the need for 2 liver transplants. David Johnston, ELC epidemiologist with the Hawaii Department of Health's Disease Outbreak Control Division, said the agency continues to investigate the outbreak. A total of 44 individuals have reported using OxyElite Pro and met the agency's definition, he said. Of those individuals, 15 were hospitalized, Johnston said. USPlabs in 2013 defended the safety of an ingredient (aegeline) in OxyElite Pro in a letter to FDA [Food and Drug Administration], citing tests and clinical data on the substance. Still, the company agreed to reformulate the supplement by removing aegeline, which FDA declared was not proven to be safe, and destroy the remaining inventory of aegeline-containing OxyElite Pro. FDA indicated in 2013 that the destroyed supplements were worth USD 22 million. USPlabs expressed the belief that counterfeit versions of its OxyElite Pro were marketed in the USA. Arthur Whitmore, an FDA spokesperson, said the agency has not confirmed any products were counterfeit. FDA and Hawaii officials previously noted victims of

the outbreak were not predisposed to liver disease, increasing the likelihood that OxyElilte Pro was responsible for the illnesses. The CDC also excluded certain individuals from its case definition, including those people who suffered chronic alcohol use, preexisting autoimmune hepatitis, and chronic liver diseases, such as hemochromatosis and Wilson's disease. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS*

CIGUATERA FISH POISONING (AUSTRALIA): 12 March 2014, A 25 kg (55 lb) Spanish mackerel caught off the mid north coast over the weekend [1-2 Mar 2014] sent 9 people to hospital with ciguatera poisoning. The fish was caught near Scotts Head, south of Macksville mid morning on Sunday, 2 Mar 2014. One of the fishermen Peter Joyce said he and the boy who caught the mackerel cleaned it and divided it up. He said the fish was shared with family and friends, and those who ate it were then rushed to hospital early yesterday [3 Mar 2014] morning. Joyce added, "About 6 hours after eating the fish they nearly all landed in hospital. The people that are in hospital suffered from like tingling all across the body, cold water feeling giving them a hot sensation, vomiting, diarrhea, and extreme lethargy. They were as 'weak as kittens' as one of the patients put it. Meanwhile recent outbreaks of ciguatera poisoning have forced a rethink of the rules regarding the sale of large pelagic fish on the north coast. It comes after the weekend incident at Scotts Heads, and the poisoning of 4 others at Evans Head in February 2014. The general manager of the Ballina Fishermen's Co-op, Phil Hellard, said it appears affected fish are being caught further south. "We do have a risk management strategy in place that says anything that was caught north of Byron Bay that weighed more than 10 kilos [22 lb] couldn't be taken for human consumption, and that's worked for us, he said. "With these new cases we've now instituted a ban on all fish over 10 kilos in the mackerel species." (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

National and International Disease Reports are retrieved from http://www.promedmail.org/.

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media) SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE *acute exacerbation* of chronic illnesses.)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Neurological	ACUTE neurological infection of the central nervous system (CNS) SPECIFIC diagnosis of acute CNS infection such as pneumococcal meningitis, viral encephalitis ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephalitis NOS, encephalopathy NOS ACUTE non-specific symptoms of CNS infection such as meningismus, delerium EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's	Not applicable
Rash	ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs) SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheaic dermatitis, rosacea EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema	Smallpox
Specific Infection	ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal) INCLUDES septicemia from known bacteria INCLUDES other febrile illnesses such as scarlet fever	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents (continued from previous page)

Syndrome	Definition	Category A Condition
Fever	ACUTE potentially febrile illness of origin not specified INCLUDES fever and septicemia not otherwise specified INCLUDES unspecified viral illness even though unknown if fever is present EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome	Not applicable
Severe Illness or Death potentially due to infectious disease	ACUTE onset of shock or coma from potentially infectious causes EXCLUDES shock from trauma INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths	Not applicable

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION

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